



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II  
26 FEDERAL PLAZA

NEW YORK, NEW YORK 10278

3 SEP 1986

CERTIFIED MAIL--  
RETURN RECEIPT REQUESTED

William P. Ward  
General Motors Corporation  
General Motors Technical Center  
Warren, MI 48090-9015

Re: Administrative Orders Index No. II-CERCLA-50114 and -60102  
concerning the Scientific Chemical Processing Site, 216  
Paterson Plank Road, Carlstadt, New Jersey

Dear Mr. Ward:

Enclosed you will find EPA's final comments on Dames & Moore's Draft Project Operations Plan for a Remedial Investigation at the above-referenced site. These comments, originally sent to you on July 16, 1986, have been updated to reflect modifications and/or clarifications made at a meeting held August 5, between representatives of EPA, NJDEP, Dames & Moore, Ebasco and the Steering Committee, as well as during subsequent telephone conversations between yourself and Janet Feldstein, of my staff.

As you are aware, the Order requires that, within 7 days of your receipt of these final comments, an appropriately modified Site Operations Plan be submitted to EPA.

In addition, I have enclosed a copy of the attendance sheet from the August 5 meeting.

If you have any questions regarding these comments, please call Janet Feldstein, of my staff, at (212) 264-0613.

Sincerely yours,

John V. Czapor, Chief  
Site Compliance Branch

Enclosures

cc: Tom Armstrong, General Electric (via Certified Mail)  
Gerard Coscia, Dames & Moore  
Robert Soboleski, NJDEP  
Christine Altomari, NJDEP  
Harry Yeh, Ebasco

(all w/attachments)

SDMS Document



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SCP-Carlstadt Site  
Final Comments on Draft Project Operations Plan\*

Section

- 3.2           Reference is made to a sludge pit in the northwest corner of the site. NJDEP believes that lagoons/sludge pits were located in the northeastern portion of the site. Information obtained from aerial photographs should be featured on the site layout (figure 3-2).

AGREED: "NORTHWEST" WAS A TYPOGRAPHICAL ERROR AND WILL BE CORRECTED.

- Fig. 4-2    The results from the geophysical surveys may influence the locations of the borings, monitoring wells and soil samples. However, this figure indicates that the final week of geophysical surveys will overlap with the initiation of the Phase I field work. It is recommended that time for review of the survey results and approval for modification of proposed locations be worked into the schedule.

DAMES & MOORE STATED THAT THE GEOPHYSICAL SURVEYS WILL ONLY IMPACT THE LOCATIONS OF SOME OF THE WELLS, BUT AGREED TO SUBMIT THE RESULTS OF THE SURVEYS TO EPA AND NJDEP. EPA AND NJDEP WILL REVIEW RESULTS AND AGREED TO COMMENT WITHIN ONE WEEK OF RECEIPT.

- 5.2           What is considered QA documentation? (p.5-4)

DAMES & MOORE WILL CLARIFY

- 5.3           The QA Manager is not described as a key person. What are the responsibilities of the QA Manager shown in Figure 5-1?

DAMES & MOORE WILL DESCRIBE QA MANAGER AND RESPONSIBILITIES.

- 6.0           Are Sections 15 and 16 of the Plan required for QA to meet the project objective?

YES. WILL BE REVISED.

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\* These comments were originally provided to the Designated Coordinator on July 16, 1986. At a meeting held August 5, as well as subsequent telephone conversations, the comments were resolved and/or clarified and these final comments were prepared. The "resolution" of each of the original comments appears below each comment in capital letters.

Section

- 6.2.2 One trip blank is required for each set of containers per matrix returned to the lab. (see Section 14.1)

AGREED

- 6.3 The addition of a few "random" soil samples would help to alleviate the "built-in" bias.

EPA AND NJDEP RECOMMEND ADDITIONAL SOIL SAMPLES TO BETTER CHARACTERIZE THE SITE.

- 7.2.3 This criteria for PPE is incorrect. See Comments on Appendix B.

AGREED

- 7.2.4.1 All disposable PPE cannot be stored on site; it should be disposed of at an EPA-approved facility.

AGREED. DISPOSABLE EQUIPMENT MAY BE STORED ONLY UNTIL THE CONCLUSION OF FIELD WORK.

- 7.2.6 The list of chemicals which appears in Table 7-1 is totally incomplete as a guide to the "types and possible concentrations that may be encountered...". The types and possible concentrations are still unknown and could be diverse.

AGREED

- 7.4 It may be necessary to do some fence repair, as access cannot presently be controlled, and there may be a danger of vandalism to equipment, etc.

AGREED

- 7.6 As stated previously, an additional objective of the geophysical survey is to help finalize the locations of borings, monitoring wells, and soil samples. Also, in sections related to the borings, monitoring wells, and soil sampling, it should be mentioned that the locations will be finalized after evaluation of the results of the geophysical survey.

AGREED

The Refraction Survey (see Work Plan) was not included in this Plan. This should be corrected.

AGREED. WILL BE MENTIONED FOR LATER DECISION.

Section

- 7.6 There is no description of format for results from the geophysical surveys. EPA should be provided with the results as soon as they become available.

WILL BE CLARIFIED

Clarify if "continuously" means split spoons every two feet.

YES, WILL BE CLARIFIED

- 7.7.5.4 The monitoring wells must be constructed entirely of stainless steel, type 316, unless adequate justification for use of type 304 stainless steel can be provided.

AGREED

Screen slot size determination can be determined in advance.

AGREED, WILL BE SPECIFIED

It is recommended that the results of the OVA head space analysis also be used as a guide for collection of the most contaminated sample, in addition to visual evidence of discoloration (see Section 6.3)

AGREED

- 7.7.5.7 To minimize the risk of contamination, it is suggested that the air-lift system not be used. Centrifugal pumps could be used for the shallow wells and submersible pumps for the deep wells.

AGREED

The Work Plan suggested "permeability testing of the clay layer." This should be included in the POP.

AGREED, WILL BE INCLUDED

- 7.8 For studying the tidal influence on the aquifers, the tidal staff should be located close to the selected well pairs (either MW-5S/5D or MW-7S/7D) for installation of water level recorders rather than the location shown on figure 7-3. The well pairs should be selected after the results of the geophysical survey.

AGREED

Section

- 7.8 The frequency for taking readings should be specified, to insure that adequate data is collected. It is suggested that hourly readings be taken during the daytime survey hours.

AGREED

Where are the sampling forms which will be used?  
(Item 12)

WILL BE INCLUDED

The polypropylene line on the bailers must be monofilament.

AGREED

Cleaned bailers should be wrapped in heavy gauge aluminum foil during transport, not polyethylene bags.

AGREED (SHINY SIDE OUT!)

All sample bottle labels should include the following information:

- |                              |                                    |
|------------------------------|------------------------------------|
| a. site name                 | f. type of sample(comp/grab, etc.) |
| b. sample number             | g. sample volume                   |
| c. name of collector         | h. analysis required               |
| d. date & time of collection | i. preservative                    |
| e. place of collection       |                                    |

Metals samples must be taken unfiltered, i.e. as total metals, in order to more fully characterize the site contamination. Dissolved metals samples may then be taken in addition.

AGREED. DAMES & MOORE HAS THE OPTION TO INCLUDE FILTERED METALS SAMPLES IN ADDITION TO UNFILTERED.

Section

7.9.5 The proper cleaning procedure for all sampling equipment is as follows:

- a. wash with a low phosphate detergent;
- b. tap water rinse;
- \*c. rinse with a 10% nitric acid solution;
- d. tap water rinse;
- e. acetone rinse or methanol followed by hexane rinse;
- f. deionized water rinse; and
- g. air dry.

\*NOTE If no metals samples are being taken the 10% nitric acid rinse may be omitted.

AGREED

Drilling equipment should be steam cleaned.

AGREED

7.10 NJDEP RECOMMENDS IMPLEMENTATION OF A SEDIMENT CONTROL PROGRAM.

It is not clear that Dames & Moore has considered the complex nature (i.e., tidal influences) of the creek in designing a sampling program.

DAMES & MOORE SHOULD DESIGN A STREAM SAMPLING PROGRAM WHICH CONSIDERS THE COMPLEX NATURE OF THE STREAM. PROGRAM PROPOSED IN DRAFT POP WILL NOT ENABLE DAMES & MOORE TO ADEQUATELY DETERMINE THE SITE'S IMPACT ON THE STREAM AND SURROUNDING WATERS.

7.10.5.1 Containers with preservative added should not be immersed in the surface water because of probable loss. Preservative should be added after the sample has been collected.

AGREED

7.10.5.2 Sediment samples should be taken with stainless steel or brass corers, or corers having removable Teflon or glass inner liners. These will better insure the integrity of the surface layer of sediments and will minimize the loss of fine-grained material.

AGREED

- 7.11 The samples to be collected from the unsaturated zone may not provide a good indication of the contamination potential from surface runoff and erosion. The concentrations of certain contaminants which are strongly sorbed by soils (such as PCBs) may be highest in the shallowest soils. Therefore, it is recommended that at least some soil samples be collected at depths of 0-6 inches. Appropriate areas for collection of such samples would include the tank farm areas where PCBs were stored.

THE COMMITTEE SEEMS TO HAVE MADE THE PRESUMPTION THAT THE TOP 6" OF SOIL WILL BE REMOVED, THEREFORE SAMPLING IS UNNECESSARY. EPA FEELS THAT SOME SHALLOW SOIL SAMPLES WOULD BETTER CHARACTERIZE ~~THE~~ THE SITE. THE COMMITTEE'S POSITION MUST BE CLARIFIED IN THE POP IF NO SHALLOW SAMPLES WILL BE TAKEN INITIALLY.

- 7.12.5 It is not recommended that any plastic material be used during sampling.

PLASTIC SHEETING MAY BE USED TO LAY EQUIPMENT ON (IN ORDER TO PREVENT CONTACT WITH GROUND SURFACE) BUT SHOULD NOT BE USED IN COLLECTION OF WATER SAMPLES (I.E., TO FORM IMPOUNDMENT)

- 7.13 This investigation should include the identification of all underground storage tanks and pipelines. NJDEP believes that the discharge line from the main storage tank pit is closed off by valve, and its contents are unknown. NJDEP believes that another discharge line exists from the drain system for the thin film evaporator. Allowance should be made for a number of samples from these lines and from any tanks which are discovered. (Table 7-4)

AGREED

What program does the Dames & Moore QA Manager follow?

WILL BE CLARIFIED

- 7.14 Air monitoring must be conducted in conjunction with all site activities and the information gathered must be recorded and submitted in the Draft RI Report.

AGREED

- 8.0 Is training documented?

DAMES & MOORE WILL ALTER WORDING

- 9.0 Are calibration records retained on site? What calibration records are required? How is calibrated equipment uniquely identified? Are the instruments used for H&S purposes separately controlled from those used for sample monitoring?

WILL BE CLARIFIED

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Section

- 10.0 Table 10-1 The term "indicator parameters" should be clearly defined. It is recommended that these include all volatile organics, due to the complex site history and potential mobility of these contaminants.

EPA WILL BE CONSULTED, AFTER RECEIPT OF DATA, TO DETERMINE APPROPRIATE INDICATOR PARAMETERS.

Table 10-2 Pollutants previously found at the site should be targets for analysis (see Table 7-1) 11.0

AGREED, WILL BE INCLUDED

Where is the Tier I and Tier II format described?

WILL CLARIFY

- 12.0 Copies of all audit reports and audit findings should be made available to EPA.

AGREED

What is the basis for audit checklist items contained on Figure 12-1?

WILL CLARIFY

- 14.1 NJDEP policy requires that field blanks be generated for each day of sampling and each matrix, in addition to trip blanks.

- 14.2 It is suggested that a Tier I analysis program be mentioned in Section 10.0.

WILL CLARIFY

Is the computer program used for data reduction verified?

WILL CLARIFY

Appendix A

The QA Short form has no parameter table. This is necessary for EPA's review. (See EPA's "Guidance for Preparation of Combined Work/Quality Assurance Plans for Water Monitoring," May 1983.)

AGREED

Table A-1 of the short form should reference Table 10-2 for "priority pollutants."

AGREED

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What program does the Dames & Moore QA Manager follow when assuring the final validation of the data?

DAMES & MOORE MUST FOLLOW CLP PROTOCOLS TO VALIDATE DATA

The data gathered will be used to assess the nature and extent of contamination at the site. Analysis of the data will include an assessment of the threats posed to the public health, welfare or the environment. The feasibility study will include the development and evaluation of remedial alternatives to mitigate the threats to the public health, welfare or the environment.

AGREED

#### Appendix B

1. The responsibilities of the On-Site Safety Officer must be described in detail such responsibilities may include:
  - ° Site activities during level A, B or high hazard C activities;
  - ° Approval procedures to determine personnel qualified to work on-site;
  - ° Training activities to implement procedures in this plan;
  - ° Stop work authorization; and
  - ° Approval procedures in changing the Dames & Moore Health and Safety plan.
2. Calibration of the PID, OVA and CGI must include regular calibration using the appropriate ultra-zero and indicator gas (Methane, Isobutylene, etc.). Electronic zeroing is not a sufficient calibration procedure.
3. There is no mention throughout this document on protocols for conducting air samples using the PID, FID, CGI or other sampling methods. Such protocols must be developed to detail where and how sampling must be conducted during each major operation (drilling, tank sampling, surface sampling, etc.).
4. The Action Level Criteria in Table 3 (Appendix B) and referenced in Section 7.2.3 should be modified as designated in EPA Guidance document titled Standard Operating Safety Guides, November, 1984;

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<u>Hazard</u>	<u>Monitoring Method</u>	<u>Action Level*</u>	<u>Level</u>
Unknown toxic vapors	PID	<.2 ppm	D
	PID>.2ppm,	<5ppm	C
	PID >5ppm,	<500ppm	B
	PID	500ppm	A

<u>Hazard</u>	<u>Monitoring Method</u>	<u>Action Level *</u>	<u>Level</u>
Known Toxic Vapors	PID/OVA, Detector Tubes, Others	>TLV**	C
Same as above		>10(x)TLV	B

\* Levels above background.

\*\* TLV -Treshold Limit Values as defined in the 1984 - 1985 Threshold Limit Value Booklet published by the American Governmental Industrial Hygienists.

5. Levels A, B, C, and D should be described in detail in Table 4 (Appendix B) to conform with EPA Guidance document titled "Standard Operating Safety Guides," November 1984.
6. The use of detector tubes as a primary means of determining levels of protection has limitations. The tubes should be used only in support of PID/FID monitoring only.
7. All personnel operating at the SCP site in areas requiring Level D, C or B personal protective equipment should participate in a medical surveillance program which qualifies them to work at a hazardous waste site and wear respiratory protection. They also should have attended a formalized hazardous waste health & safety training course equivalent to the REM III 3-day Fundamental Health & Safety training requirements.

DAMES & MOORE AGREED TO INCORPORATE THESE COMMENTS

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## 8. Emergency Procedures

Phone numbers of the local hospitals and Poison control center should be added to the Emergency contact list. In addition EPA should be notified.

Evacuation Routes and Emergency Procedures should be posted at the Site.

Investigation should be made regarding the nearest emergency medical treatment facility and its ability to handle chemical exposure cases. Arrangements should be made for treating, admitting and transporting injured personnel to such facility.

The location, directions to, travel time to, and telephone number of this facility should be posted at the site.

Local officials should be contacted to establish procedures for evacuation, prior to commencement of the RI/FS.

A List of Emergency Equipment which will be on site should be included in this plan.

Emergency eye washes should be located on the "hot" side of the contamination reduction zone or work area. All personnel must pass through the contamination reduction zone to enter or exit the exclusion zone.

An emergency shower or spray cans should be located on the clean side of the contamination reduction area.

DAMES & MOORE AGREED TO INCORPORATE THERE COMMENTS

### HASP-General

At the discretion of the on-site Safety Officer, all personnel working in the exclusion area shall take a hygienic shower.

All supplied breathing air shall be certified as grade D or better.

Where practical, all tools/equipment will be spark proof, explosion resistant; and/or bonded and grounded.

Fire equipment will be on-site for use on equipment or small fires only.

Since site evacuation may be necessary if an explosion, fire or release occurs, and individual shall be assigned to sound an alect and notify the responsible public officials if required.

A daily safety meeting will be conducted for all site personnel. The safety procedures, the day's planned operations, any changes in safety requirements, and site hazards should be discussed.

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Disposable clothing and other decontamination equipment and solution must be disposed of off-site at an approved facility.

Prior to first time entry, the site must be checked for radioactivity, explosivity and oxygen deficiency.

A work/rest schedule to compensate for possibility of heat stress should be established.

It should be noted that there is the possibility of personnel encountering substances other than those listed in Tables 1 and 2.

DAMES & MOORE AGREED TO INCORPORATE THESE COMMENTS.

Miscellaneous

When are sample bottles to be labeled (in the field prior to sampling or after?)

WILL BE CLARIFIED

Further soil sampling should be done in the northeastern corner of the site.

EPA & NJDEP RECOMMEND TWO BORINGS (TWO SAMPLES EACH) IN THE NORTHEASTERN PORTION OF SITE. AGREED

An additional two borings should be made in the southern quadrant of the site to better characterize this area.

AGREED (TWO SAMPLES EACH)

All well screens and casings must be schedule forty stainless steel.

NJDEP PERMIT OFFICE REQUIRES SCHEDULE FORTY.

Downhole air monitoring using a PID or OVA should be performed during the drilling of all wells and piexometers. Ir readings should be recorded with the geologic logs.

AGREED

Exact procedures for water level measurements should be included in the POP.

AGREED

Drilling equipment should be steam cleaned.

AGREED

003554

NJDEP questions whether the screen intervals for the shallow wells should include formations above and below the meadow mat.

Dames & Moore should include providing split samples to EPA's designated representative in its description of field activities.

AGREED

Cleaning and rinse water should not be discharged to the ground surface.

ALL DECON WATER MUST BE COLLECTED, ANALYZED, AND PROPERLY DISPOSED OF.

The legal requirement for holding time for volatile organics is 7 days, not 14 days as is stated in ETC's SOP manual.

WILL CHANGE TO REFLECT LEGAL REQUIREMENT.